

## WHAT IS CLAIMED IS:

1. A method for screening compounds useful for the treatment of proliferative and differentiative disorders comprising contacting a compound with a cell or a cell extract  
5 expressing Skp2 and one or both of p27 and Cks1, and detecting a change in the activity of Skp2.
2. The method of Claim 1 wherein the change in the activity of Skp2 is detected by  
10 detecting a change in the interaction of Skp2 with either p27 or Cks1.
3. The method of Claim 1 wherein the change in the activity of Skp2 is detected by  
detecting a change in the ubiquitination of p27 or degradation of p27 or Cks1.
4. A method for screening compounds useful for the treatment of proliferative and  
15 differentiative disorders comprising adding a compound in a purified system containing Skp2  
and one or both of p27 and Cks1, and detecting a change in the activity of Skp2.
5. The method of Claim 4 wherein the change in the activity of Skp2 is detected by  
20 detecting a change in the interaction of Skp2 with either p27 or Cks1.
6. The method of Claim 4 wherein the change in the activity of Skp2 is detected by  
detecting a change in the ubiquitination of p27 or degradation of p27 or Cks1.
7. A method for screening compounds useful for the treatment of proliferative and  
25 differentiative disorders comprising adding a compound in a purified system containing Skp2  
and one or both of a polypeptide corresponding to the carboxy terminus of the human p27  
chain having the sequence NAGSVEWTPKKPGLRRRQT with or without a  
phosphothreonine at position 187 and Cks1, and detecting a change in the activity of Skp2.
- 30 8. The method of Claim 7 wherein the change in the activity of Skp2 is detected by  
detecting a change in the interaction of Skp2 with either the polypeptide or Cks1.
9. The method of Claim 7 wherein the change in the activity of Skp2 is detected by  
35 detecting a change in the ubiquitination of the polypeptide or degradation of the polypeptide  
or Cks1.